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BRIEF DESCRIPTION OF THE UNIT / RESEARCH GROUP

Experiments for the production of porous magnetic glasses and other nanocomposite materials at LUH and investigation and evaluation of experimental results at SPbPU.

WHAT WE OFFER / PROJECT DESCRIPTION

We have a long experience in research of nanocomposite materials, about preparation of such materials and investigations of their properties. The Institute of Electrotechnology has a wide field of experience in the electrothermal and electromagnetic processing of materials. It has a laboratory with a wide offer of facilities (experimental setups, frequency generators) for electromagnetic processing of materials. The cooperation in the frame of this project offers an excellent chance to combine the knowledge and experiences of both research groups to carry out new research in the field of nanocomposite materials. In the frame of the currently running cooperation experiments for the production of porous magnetic glasses are carried out at the Institute of Electrotechnology in Hannover using the existing laboratory equipment. Investigations of the produced samples are done at the Center „Physics and Nanocomposite Materials“ in St. Petersburg. The main aim of the experiments in the frame of this project is to carry out pre-experiments in order to apply a common research project in the next step (e.g. at German DFG and Russian RFBR).

KEYWORDS

Nanocomposite materials, porous magnetic glasses, electromagnetic processing of materials